

5/17/91
Big mine file
ce Haddock
(+ all other
attachments)
to Daron

**EarthFax**

EarthFax
Engineering Inc.
Engineers/Scientists
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Suite 100
Midvale, Utah 84047
Telephone 801-561-1555

April 15, 1991

Dr. Dianne R. Nielsen, Director
Utah Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Dear Dr. Nielsen:

Please find the enclosed changes to Genwal Coal Company's Mining and Reclamation Plan (Permit Number ACT/015/032). These modifications are in response to DOGM Division Order Number DO 91-B, ordered April 18, 1991, and received by Genwal April 19, 1991.

Concerns in this order were originated by the Division of Wildlife Resources (March 20, 1991). All permit deficiencies are addressed in the herein permit amendments, with the exception of the recommended additions to the seed mix. Conversations with the United States Forest Service, Manti-LaSal National Forest, revealed a discrepancy between the DWR and the USFS as to what seed mixture is preferred. At this point, Genwal Coal prefers to wait until a regulatory consensus as to what modifications to the present seed mixture are reached, prior to addressing this concern. Genwal commits to modifying the seed mix in the mining and reclamation plan within 14 working days after receiving notification of what seed mix is required.

If further information is required please don't hesitate to call myself at 561-1555, or Randall Ralphs of Genwal Coal Company at 687-9813.

Sincerely,

Brent K. Bovee

Brent K. Bovee
Geologist

cc: Walt Nowak, USFS
Daron Haddock, DOGM

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DIVISION OF
OIL GAS & MINING

10.3.2.4 Birds. Information pertaining to migratory and upland game birds within the permit area is included in Appendix 10-3 and the included Table 5. Eleven of the twenty two migratory birds are raptors as described in detail in Appendix 10-3. There are no known locations of drumming logs in Crandall Canyon or near the proposed disturbance areas, according to Larry Dalton.

10.3.2.5 Reptiles and Amphibians. The published ranges and habitat preferences of the vertebrate species of southeastern Utah have been compared with the location and available habitats of Crandall and Huntington Canyons. Amphibians are always found near water with the habitats found along Huntington and Crandall Creeks and in springs and seeps found on the hillsides above the creeks. Refer to Table 5 included within Appendix 10-3.

10.3.3 Species Of Special Significance. It is possible that the bald eagle or peregrine falcon could use the area, but only on a transitory basis. A golden eagle nest (181.167) has been located on the proposed permit area, approximately 0.8 km to the northeast and above the existing mine portals. In 1980, this nest fledged one young. The golden eagle nest site was inactive from 1982 through the 1987 monitoring by the DWR. However, a US Fish and Wildlife Service memo dated May 6, 1981, indicates that the nest may have been occupied in 1981. The Fish and Wildlife Service examined the golden eagle, Acquila chrysaetos, nest site twice during 1981. Eagles were observed near the site both times. The conclusions reached by the FWS is that the site represents an occupied territory consisting of a single nest that for some undetermined reason did not initiate or at least complete a nesting attempt in 1981. The applicant monitored the nest site in the spring of 1982 and did not observe any golden eagles in the nesting area relieving the applicant of any reporting requirements to the regulatory authority. The US Fish and Wildlife Service feels that human disturbance may have caused the eagles to forego or abandon a nesting attempt in 1981, refer to letter dated January 27, 1982, included as Appendix 10-1. Commencing in May of 1991, and continuing on an annual basis, aerial surveys will be conducted in conjunction with the Division of Wildlife Resources (communication: Bill Bates, DWR, April 15, 1991) to monitor nesting activity.

A copy of the plan to meet the above requirements was submitted to the Utah Bureau of Water Pollution Control in 1982, with a request for a temporary variance to sediment control standards during the applicant's construction phase.

Turbidity measurements will be taken daily as indicated. Turbidity will not be allowed to increase more than 10% above background levels. The samples will be taken to a certified lab, and we will request the analysis for turbidity results be indicated in NTUs. That should satisfy the request for turbidity studies as suggested by DOGM.

Applicant has submitted final drawings, refer to Plate 3-1, with this document that show an elevated USFS development road between the coal stockpiles and the creek. Refer to the narrative in Chapter 3 pertaining to the mine site plans. Temporary sediment control measures as described above will be installed as per the design narrative. It will not be necessary to disturb the creek with vehicles or equipment to complete their construction. Most of the riparian vegetation along the creek can be saved if constructed as designed. Installation of a culvert would destroy the riparian vegetation and the food producing ability of the creek. Some of the construction would have to be on Beaver Creek property, which they will not authorize.

10.7 Fish And Wildlife Monitoring

The initial aquatic study and report provides sufficient data, and therefore, applicant proposes to continue monitoring for stream flow and water quality only. The applicant agrees to work with the regulatory authority to develop and carry out appropriate mitigation plans should stream flow diminish significantly or if water quality deteriorates.

Genwal recognized that all amphibian and reptile species (see Table 5 of Appendix 10-3) are protected in Utah. Snake dens, if found, will be protected and reported to the Division of Wildlife Resources.

Horizontal movement which would create slope failure is not expected to occur due to subsidence along the escarpment because only limited coal outcrop occurs within the lease. Within that area of old works no pillar extraction is anticipated. Areas along Huntington Creek directly above the coal outcrop have a slope of approximately 60% and the limited escarpment faces which produce the concern for failure are located approximately 1000' above the coal seam. As with areas in the western part of lease SL 062648 and at the COOP's Trail Canyon and Bear Canyon Mines and the Beaver Creek #4 mine no escarpment failure has occurred. Horizontal movement creating tension or compression cracks can not be projected due to the overburden thickness and lack of jointing density and attitude data along the surface rock exposures.

12.4.3 Subsidence Control and Mitigation Methods. As previously presented within this report, no material damage or diminution of value or foreseeable use of lands is expected to occur. Genwal has been in consultation with the BLM and received their concurrence with the conclusions presented in this document, a copy of the BLM correspondence may be found in Appendix 12-7. Displacement of wildlife due to subsidence may be minimal. However, springs within the potential subsidence limit are a significant resource to local wildlife and may be impacted. Refer to Section 3.4.6.2 for proposed mitigation.

In the event grazing is negatively impacted due to the occurrence of surface subsidence, the operator will compensate the owner or appropriate party by paying the fair market value of the loss experienced. The compensation will be made only after the loss is proven to be a direct result of the subsidence impact. Discussions are currently under way with the Utah Division of Wildlife on the need for the installation of wildlife guzzlers. Any required installation will be addressed in the wildlife section. A raptor nest is located within the area of potential subsidence in Lease Area U 054762, Lot No. 3 (Plates 10-1 and 12-2). This nest was inactive when inspected by helicopter in 1982 and 1987 (see Section 10.3.3). Commencing in May 1991, annual helicopter surveys will be performed in conjunction with the Division of Wildlife Resources, to monitor nesting activity (section 10.3.3). Aerial helicopter survey results will be submitted to DOGM on an annual basis. If this nest becomes active and is to be affected by

- (13) Williamson's Sapsucker (Sphyrapicus thyroideus): An uncommon ~~summer~~ resident of high coniferous forests and burns, whose range does not include the Huntington Canyon area.**
- (14) Lewis' Woodpecker (Asyndesmus lewis): A little known ~~summer~~ resident and transient preferring scattered or logged forests, burns, cottonwood groves and Ponderosa Pine, but whose range does not include the Huntington Canyon area.
- (15) Great Blue Heron (Ardea herodias): A common resident of marshes, shallow reservoirs, rivers, streams, shores and irrigation ditches. The swift water and dense streamside growth along Crandall and Huntington Creek would not be suitable habitat for a Great Blue Heron. The beaver ponds in Crandall Canyon are very small and not likely to attract a heron.
- (16) Long-billed Curlew (Numenius americanus): An uncommon ~~summer~~ resident and transient partial to meadows, pastures, and wetlands. None of these habitats are found in Crandall Canyon, nor nearby in Huntington Canyon.
- (17) Band-tailed Pigeon (Columba fasciata): An uncommon ~~summer~~ resident and transient of forests, canyons, foothills near mountain brush (acorns) and agricultural lands. Although not seen during the spring, ~~summer~~, and fall of 1980, this species could find suitable habitat in Crandall Canyon.

** The Williamson's Sapsucker (*Sphyrapicus thyroideus*) utilizes (nests) in the environs of the Huntington drainage typical to those found in Crandall Canyon.

(Division of Wildlife Resources, DOGM Division Order # DO 91-B, April 18, 1991.)

STATE PROTECTED SPECIES SURVEY

State laws and regulations protect a number of vertebrates whose range and habitat affinities include Crandall and Huntington Canyon.

* Amphibians: Tiger Salamander (Ambystoma tigrinum)

* Reptiles: None

Birds: All birds are protected. Besides the twenty-two already discussed under Migratory Birds of High Federal Interest two other potential residents of Crandall Canyon are listed as rare or limited. They are:

1. Gray Jay (R) (Perisoreus canadensis) which likes coniferous forests;
2. Yellowthroat (L) (Geothlypis trichas) which inhabits willow thickets along streambeds.

Mammals: Of the seventeen mammals listed as protected whose published ranges and habitat preferences include Crandall Canyon, nine have been observed to be present:

1. Snowshoe Hare (Lepus americanus)
2. Mountain Cottontail (Sylvilagus nuttallii)
3. Beaver (Castor canadensis)
4. Black Bear (Ursus americanus)
5. Long-tailed Weasel (Mustela frenata)
6. Badger (Taxidea taxus)
7. Cougar (Felis concolor)
8. Mule Deer (Odocoileus hemionus)
9. Wapiti or Elk (Cervus canadensis)

The remaining eight, although not observed, may inhabit or visit the area. They are:

* All amphibian and reptile species are protected in Utah. See Table 5 for a listing of amphibian and reptile species inhabiting the Crandall and Huntington Canyon areas.